

09/341,498

(FILE 'HOME' ENTERED AT 13:40:50 ON 27 SEP 2000)

FILE 'CASREACT' ENTERED AT 13:41:20 ON 27 SEP 2000

L1 STRUCTURE UPLOADED
L2 QUE L1
L3 0 S L2

FILE 'CAPLUS' ENTERED AT 13:43:42 ON 27 SEP 2000

=> s cyclopentadienyl metal salts

22280 CYCLOPENTADIENYL
1077782 METAL
332084 SALTS
L4 2 CYCLOPENTADIENYL METAL SALTS
(CYCLOPENTADIENYL(W)METAL(W)SALTS)

=> d 1-2 bib abs

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS

AN 1998:490645 CAPLUS

DN 129:136308

TI Process for producing cyclopentadienyl metal
salts and process for producing cyclopentadiene derivatives by
utilizing the same

IN Oda, Yoshiaki; Yamauchi, Kazuhiro; Hanaoka, Hidenori; Souda, Hiroshi
PA Sumitomo Chemical Co., Ltd., Japan; Oda, Yoshiaki; Yamauchi, Kazuhiro;
Hanaoka, Hidenori; Souda, Hiroshi

SO PCT Int. Appl., 56 pp.

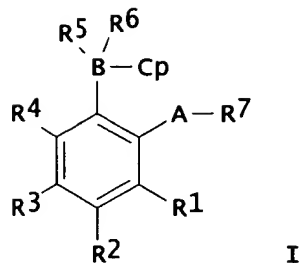
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9830567	A1	19980716	WO 1998-JP110	19980114
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE	JP 10259188	A2	19980929	JP 1998-5184	19980113
	JP 10259152	A2	19980929	JP 1998-5185	19980113
	JP 10259185	A2	19980929	JP 1998-5527	19980114
	EP 963990	A1	19991215	EP 1998-900362	19980114
	R: DE, FR, GB, NL				
PRAI	JP 1997-5036		19970114		
	JP 1997-5037		19970114		
	WO 1998-JP110		19980114		
OS	CASREACT 129:136308; MARPAT 129:136308				
GI					



AB Claimed is a process for producing cyclopentadienyl metal salts which comprises reacting a cyclopentadiene deriv. with a metal hydride in the presence of an amine compd. This document also discloses a process for producing cyclopentadiene derivs. I [A represents a Group 16 element of the Periodic Table; B represents a Group 14 element; R1 to R6 each represents alkyl, etc.; and R7 represents a hydrocarbon group or a trisubstituted silyl; Cp = cyclopentadiene moiety] by utilizing this reaction. By using these processes, not only a variety of cyclopentadienyl metal salts but cyclopentadiene derivs. can be produced in high yields with high conversions without using an expensive reagent or low-temp. facilities.

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS

AN 1998:289616 CAPLUS

DN 129:28072

TI Preparation of cyclopentadienyl-containing silicon or germanium compounds as materials for metallocene catalysts

IN Fukuoka, Daisuke; Nitahara, Masatoshi

PA Mitsui Petrochemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

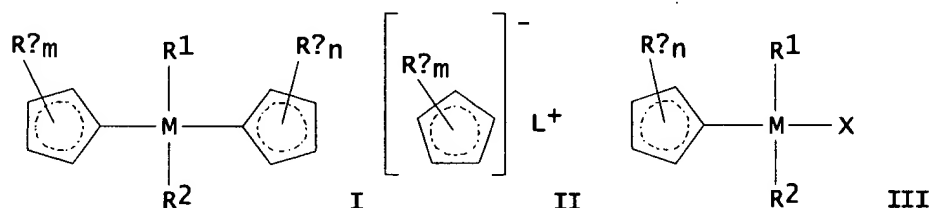
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10120688	A2	19980512	JP 1996-273444	19961016
OS	CASREACT 129:28072; MARPAT 129:28072				
GI					



AB Title compds. I (M = Si, Ge; Ra, Rb = H, halo, alkoxy, aryloxy, C1-30 hydrocarbon, etc.; m = 1-4; n = 1-4; Ram .noteq. Rbn; R1, R2 = H, halo, alkoxy, aryloxy, etc.) are prepd. by reaction of cyclopentadienyl metal salts II (Ra, m = same as I; L = Li, Na, K) with silicon or germanium halides II (Rb, n, R1, R2, M = same as I; X = halo) in the presence of cyanides or thiocyanates. 2-Propyl-4-(9-phenanthryl)indene was reacted with BuLi in Et2O-hexane soln. at room temp. for 18 h and then was condensed with Me2SiCl2 in Et2O under ice-cooling for 5 h to give a product which then was treated with a soln. prepd. by reaction of 2-ethyl-4-(9-phenanthryl)indene with BuLi in Et2O-hexane, in the presence of CuSCN at room temp. for 20 h to give 95% [2-ethyl-4-(9-phenanthryl)indenyl][2-propyl-4-(9-phenanthryl)indenyl]dimethylsilane.

=> s cyclopentadiene and metal hydride

13059 CYCLOPENTADIENE
 1077782 METAL
 71691 HYDRIDE
 4840 METAL HYDRIDE
 (METAL(W)HYDRIDE)

L5 18 CYCLOPENTADIENE AND METAL HYDRIDE

=> s 15 and amine

L6 175174 AMINE
 1 L5 AND AMINE

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2000 ACS

AN 1998:490645 CAPLUS

DN 129:136308

TI Process for producing cyclopentadienyl metal salts and process for producing cyclopentadiene derivatives by utilizing the same

IN Oda, Yoshiaki; Yamauchi, Kazuhiro; Hanaoka, Hidenori; Souda, Hiroshi

PA Sumitomo Chemical Co., Ltd., Japan; Oda, Yoshiaki; Yamauchi, Kazuhiro; Hanaoka, Hidenori; Souda, Hiroshi

SO PCT Int. Appl., 56 pp.

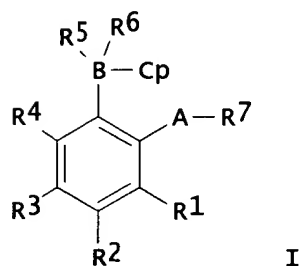
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9830567	A1	19980716	WO 1998-JP110	19980114
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE	JP 10259188	A2	19980929	JP 1998-5184	19980113
	JP 10259152	A2	19980929	JP 1998-5185	19980113
	JP 10259185	A2	19980929	JP 1998-5527	19980114
	EP 963990	A1	19991215	EP 1998-900362	19980114
	R: DE, FR, GB, NL				
PRAI	JP 1997-5036		19970114		
	JP 1997-5037		19970114		
	WO 1998-JP110		19980114		
OS	CASREACT 129:136308; MARPAT 129:136308				
GI					



AB Claimed is a process for producing cyclopentadienyl metal salts which comprises reacting a cyclopentadiene deriv. with a metal hydride in the presence of an amine compd. This document also discloses a process for producing cyclopentadiene derivs. I [A represents a Group 16 element of the Periodic Table; B represents a Group 14 element; R1 to R6 each represents alkyl, etc.; and R7 represents a hydrocarbon group or a trisubstituted silyl; Cp = cyclopentadiene moiety] by utilizing this reaction. By using these processes, not only a variety of cyclopentadienyl metal salts but

cyclopentadiene derivs. can be produced in high yields with high conversions without using an expensive reagent or low-temp. facilities.

=> s 15 not 16

L7 17 L5 NOT L6

=> b 1-17 bib abs

'1-17' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):end

=> d 1-17 bib abs

L7 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 2000:197986 CAPLUS

DN 132:236823

TI Preparation of di- or trialkyl-substituted cyclopentadienes

IN Yokoyama, Keiichi; Yoshikawa, Akira

PA Honshu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000086542	A2	20000328	JP 1998-264592	19980918

OS CASREACT 132:236823; MARPAT 132:236823

AB Title compds., useful as precursors for alkali metal

cyclopentadienylides,

are prepd. by treatment of mono- or dialkyl-substituted 1,3-cyclopentadienes with alkali metal hydrides in solvents and reaction with RX (R = C1-8 alkyl; X = halo, mesyl, tosyl). Methylcyclopentadiene was treated with NaH in THF at 10 to 40 degree. for 1 h and treated

with

BuBr at room temp. for 8 h to give 44% mixt. of 1-butyl-3-methylcyclopentadiene and 1-butyl-2-methylcyclopentadiene.

L7 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1999:425598 CAPLUS

DN 131:44962

TI Production of alkali metal cyclopentadienylide and production of dihalobis(eta-substituted-cyclopentadienyl)zirconium from alkali metal cyclopentadienylide

IN Yokoyama, Keiichi; Sugiyama, Kenji; Yoshikawa, Akira

PA Honshu Chemical Industry Co. Ltd., Japan

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

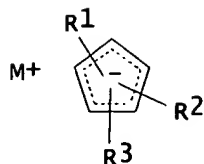
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 926150	A2	19990630	EP 1998-310534	19981221
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6046346	A	20000404	US 1998-209752	19981211
	JP 11263792	A2	19990928	JP 1998-370276	19981225
PRAI	JP 1997-359460		19971226		

GI



I

AB A process for producing an alkali metal cyclopentadienylide I (R1, R2 = same or different, C1-C8 alkyl, C6-C10 aryl, C2-C8 alkenyl, C7-C9 aralkyl;

R3 = H, C1-C3 alkyl; M+ = alkali metal ion); which process comprises reacting together, in a solvent, an alkali metal hydride and a 1,3-cyclopentadiene. The alkali metal cyclopentadienylide produced may be further reacted with a zirconium halide to form a dihalobis(.eta.-substituted-cyclopentadienyl)zirconium in good yield.

The dihalobis(.eta.-substituted-cyclopentadienyl)zirconium is useful as an olefin polymn. catalyst, an acetylene carbometallizing agent, starting material for the synthesis of a monohydride homolog, and a vulcanizing agent for silicone material and rubber.

L7 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1998:430778 CAPLUS

DN 129:149104

TI Preparation of bis(alkylcyclopentadienyl)metal complexes

IN Matsumura, Yasuo; Inomata, Yoshihisa

PA Nippon Petrochemicals Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10182681	A2	19980707	JP 1996-357749	19961227
OS	CASREACT 129:149104; MARPAT 129:149104				
AB	Title compds., useful as materials for olefin polymn. catalysts synthesis (no data), are prepd. by following the process (1) condensation of (alkyl)cyclopentadienes with aliph. aldehydes in the presence of basic catalysts, (2) reaction with metal hydrides, and (3) reaction with halides of metals chosen from Fe, Ti, Hf, and Zr. Cyclopentadiene (9.9 g) reacted with butyraldehyde in the presence of ion-exchanged Amberlyst A 27 (ion-exchanger) at room temp. for 1 h to give a mixt. contg. 46.6% 6-propylfulvene, which sequentially reacted with LiAlH ₄ in THF at <10.degree. for 20 min and with ZrCl ₄ at 5.degree. for 2 h and at room temp. for 1 h to give 1.12 g bis(butylcyclopentadienyl)zirconium dichloride.				

L7 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1996:476677 CAPLUS

DN 125:115459

TI Metal hydride-containing catalysts for polymerization of olefins

IN Aida, Fuyuki; Tajima, Yoshio; Matsuura, Kazuo

PA Nippon Oil Co. Ltd., Japan

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 714920	A1	19960605	EP 1995-850214	19951130
	EP 714920	B1	19971105		

R: DE, NL
 JP 08157523 A2 19960618 JP 1994-323846 19941201
 CA 2164161 AA 19960602 CA 1995-2164161 19951130
 PRAI JP 1994-323846 19941201
 AB The title catalyst comprise a compd. (A) of the formula
 $\text{Me1(OR1)pRq2X14-p-q}$ (R1, R2 are C1-C24 hydrocarbyl; X1 is halogen; Me1 is
 Ti, Zr, Hf; p is 0.1toeq.p.1toeq.4, q is 0.1toeq.q.1toeq.4, and
 $p+q.1toeq.4$) a specified type of metal hydride
 compd., an organocyclic compd. (C) having two or more conjugated
 double-bonds, and a borate and/or borane (D). The catalyst optionally
 contains modified organoaluminum compd. (E) having Al-O-Al bonds to
 provide enhanced catalytic performance. A catalyst contg. a metal
 component from ZrCl4 , indene, catechol borane and Me aluminosilane and
 trimethylammonium tetra(pentafluorophenyl)borate, and was used to produce
 a copolymer of 1-butene and ethylene.

L7 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2000 ACS
 AN 1995:699237 CAPLUS
 DN 123:199091

TI A Simple and Convenient Preparation of $[(\text{Ph3P})4\text{Rh2}(\mu\text{-OH})2]$ and Its
 Reactions with C-H, O-H, and M-H Acids
 AU Grushin, Vladimir V.; Kuznetsov, Vladimir F.; Bensimon, Corinne; Alper,
 Howard
 CS Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
 SO Organometallics (1995), 14(8), 3927-32
 CODEN: ORGND7; ISSN: 0276-7333

DT Journal
 LA English
 OS CASREACT 123:199091

AB A simple and efficient procedure was developed for the prepn. of
 $[(\text{Ph3P})4\text{Rh2}(\mu\text{-OH})2]$, 1, from wilkinson's catalyst and aq. KOH under
 biphasic conditions (75-85% yield). Complex 1 reacted with
 cyclopentadiene, Me malonate, and benzoic acid to give
 $[\text{CpRh}(\text{PPh3})2]$, $[(\text{Ph3P})2\text{Rh}(\text{CH}(\text{COOMe})2)]$, and $[(\text{Ph3P})2\text{Rh}(\mu\text{-PhCOO})]$,

resp.
 Depending on the amt. of formic acid, the reaction between 1 and HCOOH
 resulted in either decarboxylation and formation of
 $[(\text{Ph3P})2\text{Rh}(\text{H})2(\text{HCOO})]$
 or dehydration affording trans- $[(\text{Ph3P})2\text{Rh}(\text{CO})(\text{HCOO})]$, 6, both
 transformations being chemospecific. Treatment of 1 with $[\text{CpM}(\text{CO})3\text{H}]$ (M
 =
 Cr, Mo, W) gave heterobinuclear complexes, $[(\text{Ph3P})2\text{Rh}(\mu\text{-CO})2\text{M}(\text{CO})\text{Cp}]$,
 in excellent yield. The structure of 6 was confirmed by x-ray anal.

L7 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2000 ACS
 AN 1991:680226 CAPLUS
 DN 115:280226

TI Oxidation of $\text{CpRu}(\text{CO})(\text{PMe3})\text{H}$ by 2/3, 1, and 2 electrons by the judicious
 choice of reaction conditions. Generation of a bridging hydride via the
 reaction between a 17-electron metal hydride cation
 radical and its conjugate base

AU Ryan, Olav B.; Tilset, Mats
 CS Dep. Chem., Univ. Oslo, Oslo, N-0315, Norway
 SO J. Am. Chem. Soc. (1991), 113(25), 9554-61
 CODEN: JACSAT; ISSN: 0002-7863

DT Journal
 LA English

AB The hydride complex $\text{CpRu}(\text{CO})(\text{PMe3})\text{H}$ (I, Cp = cyclopentadienyl) undergoes
 a

chem. irreversible oxidn. at 0.34 V vs the ferrocene/ferrocenium couple
 (FC). By the judicious choice of reaction conditions, the oxidn. of I in
 acetonitrile may be directed toward a 2/3-, 1-, or 2-electron process.
 The room temp. oxidn. of I with Cp2Fe+PF6- in acetonitrile-d3 leads to

the
 virtually quant. generation of $[\text{CpRu}(\text{CO})(\text{PMe3})]2(\mu\text{-H})+$ (II),
 $\text{HRu}(\text{CO})(\text{PMe3})(\text{NCCD3})3+$ (III-d9), and cyclopentadiene in a 1:1:1
 molar ratio, in accord with an overall 2/3-electron oxidn. of I. A trace
 of $\text{CpRu}(\text{CO})(\text{PMe3})(\text{NCCD3})+$ (IV-d3) was also obsd. Dihydrogen complex
 $\text{CpRu}(\text{CO})(\text{PMe3})(\eta\text{-H2})+$ was obsd. as an intermediate in the reaction,
 and it reacted to form III-d9 and cyclopentadiene. Ferrocenium
 oxidn. of I in the presence of 2,6-lutidine proceeded as a 1-electron

process, yielding II and H⁺. In the presence of pyrrolidine, a 2-electron

process ensued and resulted in the formation of IV-d3 and H⁺. Coulometry and preparative-scale expts. performed in acetonitrile proceeded somewhat differently. The electrochem. oxidn. was a 1-electron process in the absence of base, yielding mostly III and IV, whereas a 2-electron process took place in the presence of 2,6-lutidine or pyrrolidine, yielding III. The key to explaining all of the results is that an initial proton-transfer reaction from I.bul.⁺ to a base occurs.

L7 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1989:574360 CAPLUS

DN 111:174360

TI Borole derivatives. XIII. (.eta.5-borole)iron complexes and (.eta.5-borole)(.eta.5-cyclopentadienyl)metal hydrides of iron, ruthenium and osmium

AU Herberich, G. E.; Hessner, B.; Koeffer, D. P. J.

CS Inst. Anorg. Chem., Tech. Hochsch. Aachen, Aachen, D-5100, Fed. Rep. Ger.

SO J. Organomet. Chem. (1989), 362(3), 243-57

CODEN: JORCAI; ISSN: 0022-328X

DT Journal

LA German

OS CASREACT 111:174360

AB The .eta.5-borole complexes (C4H4BR)Fe(CO)3 (R = Ph, Me) yield a large variety of substitution products when irradiated in the presence of suitable ligands, thus affording the derivs. (C4H4BR)Fe(CO)2L (R = Me, L

=
PMe3; R = Ph, L = CNCMe3, NMe, PMe3), (C4H4BR)Fe(CO)(PMe3)2 (R = Me, Ph),

and (C4H4BPh)Fe(CO)L (L = butadiene, cyclopentadiene, 1,3-cyclohexadiene, 1,5-cyclooctadiene, trans-PhCH:CHCOMe). Exhaustive decarbonylation produces the basic (C4H4BPh)Fe(PMe3)3, the benzene

complex

(C4H4BPh)Fe(C6H6), and hydrides (C4H4BR)FeHCp (Cp = cyclopentadienyl; R = Me, Ph) which are both nonrigid at low temp. (-80.degree.), and show a novel intramol. proton exchange between Fe-H and H(2/5) above room temp. (C4H4BPh)FeHCp is readily deprotonated to give a borataferrocene anion which can be isolated as the (TMEDA)Li deriv. and can form the triple-decked .mu.-(C4H4BPh)(FeCp)[Rh(COD)] (COD = cyclooctadiene). Homologous hydrides (C4H4BPh)MHCp (M = Ru, Os) were also prepd.

photochem.

from the tricarbonyls and cyclopentadiene.

L7 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1987:533518 CAPLUS

DN 107:133518

TI Organometallic chemistry of molybdenum

AU Lucas, C. Robert; Walsh, Kelly A.

CS Mem. Univ. Newfoundland, St. John's, NF, A1B 3X7, Can.

SO J. Chem. Educ. (1987), 64(3), 265-6

CODEN: JCEDA8; ISSN: 0021-9584

DT Journal

LA English

AB A lab. expt. is described that is designed to teach the principles of organometallic chem. The synthesis of [(eta.5-C5H5)Mo(CO)3]2 is described. The organometallic synthesized is used to illustrate metal-metal bond cleavage and carbonylate anion formation, metal hydride and metal alkyl formation, metal hydride activity, and metal alkyl decompn.

L7 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1986:50938 CAPLUS

DN 104:50938

TI Reactivity of the actinoid-carbon .sigma. bond: reaction of the metallocycles [(Me3Si)2N]2MCH2Si(Me)2NSiMe3 with acidic hydrogen, ready C-H activation

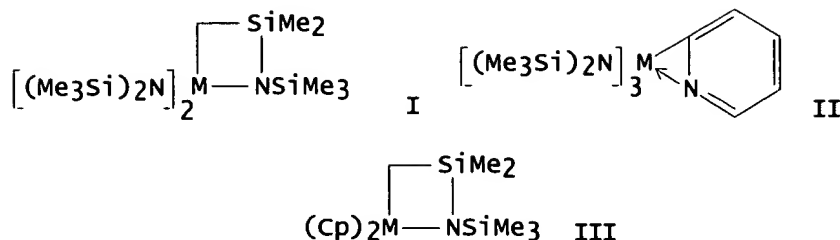
AU Dormond, Alain; El Bouadili, Abdel Aziz; Moise, Claude

CS Lab. Synth. Electrosynth. Organometall., Fac. Sci., Dijon, 21100, Fr.

SO J. Chem. Soc., Chem. Commun. (1985), (13), 914-16

CODEN: JCCCAT; ISSN: 0022-4936

DT Journal



AB The title compds. I (M = U, Th) reacted with the acidic H of alcs., phenols, or terminal alkynes. E.g., treatment of I (M = U, Th) with PhC.tplbond.CH in C6H6 gave the corresponding unstable [(Me3Si)2N]3MC.tplbond.CPh, quant. I reacted with pyridine to give the orthometalated product II. With metal hydrides, I gave stable binuclear compds. with an isocarbonyl linkage. E.g., with HMo(CO)3(Cp) (Cp = cyclopentadienyl) in THF at -30.degree., I gave the corresponding [(Me3Si)2N]3MOC.tplbond.Mo(CO)2(.eta.5-Cp). Treatment of I with cyclopentadienes cleaved the M-N bond to give biscyclopentadienyl 4-membered metallocycles. E.g., treatment of I with CpH in C6H6 gave the corresponding III.

L7 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1985:560659 CAPLUS

DN 103:160659

TI Matrix-isolation studies of the iron/cyclopentadiene system:
infrared detection of cyclopentadienyliron hydride

AU Ball, David W.; Kafafi, Zakya H.; Hauge, Robert H.; Margrave, John L.

CS Rice Quantum Inst., Rice Univ., Houston, TX, 77251, USA

SO Inorg. Chem. (1985), 24(22), 3708-10

CODEN: INOCAJ; ISSN: 0020-1669

DT Journal

LA English

OS CASREACT 103:160659

AB New IR absorptions were obsd. when Fe atoms were codeposited with cyclopentadiene (CpH) in an argon matrix at 14 K, due to the formation of (η^2 -Cp)FeH (I). I is the first detected cyclopentadienyl

transition metal hydride. Comparison of the I absorptions with those of d6-cyclopentadiene-Fe reaction products and matrix-isolated Cp₂Fe supported the formulation of I.

L7 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1984:438594 CAPLUS

DN 101:38594

Photochemical hydrogenolysis of the phosphorus-cyclopentadienyl bond of [cyclic] (CO)₄MnMo(CO)₃[.eta.⁵-C₅H₄P(C₆H₄Me-p)₂] and formation of the phosphido-bridged metal hydride complex (CO)₄Mn[.mu.⁻P(C₆H₄Me-p)₂](.mu.⁻H)Mo(CO)₂(C₅H₅)

AU Casey, Charles P.; Bullock, R. Morris

CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA

50 Organometallics (1984), 3(7), 1100-4

CODEN: ORGND7; ISSN: 0276-7333

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB Photolysis of binuclear complex I under 1 atm H gave 60% metal hydride complex II, deprotonation of which with KOH gave 68% III.

L7 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1982:455967 CAPLUS

DN 97:55967

Reactions of metal complexes with small rings. X. Reactions of carbonyl metal hydrides with methylthiirane and structure of bis[(eta.-

cyclopentadienyl)-.mu.-sulfidosulfidomolybdenum]
AU Danzer, Wolfgang; Fehlhammer, Wolf Peter; Anh Thu Liu; Thiel, Gerhard;
Beck, Wolfgang
CS Inst. Anorg. Chem., Univ. Muenchen, Munich, D-8000/2, Fed. Rep. Ger.
SO Chem. Ber. (1982), 115(5), 1682-93
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
AB Reaction of the carbonyl metal hydrides CpM(H)(CO)₃ (Cp = .eta.⁵-
cyclopentadiene, M = Mo, W), Mn(H)(CO)₅, and Fe(H₂)(CO)₄ with
methylthiirane under mild conditions leads to insertion of S into the
metal-H bond with formation of the hydrogen sulfido complexes
CpM(SH)(CO)₃, [Mn(SH)(CO)₄]₂, and Fe₃S₂(CO)₉, resp. The Mo and W compds.
also formed the dimeric complexes [CpMS₂]₂ as well as the dithiolate
bridged complex CpMo(SCHMeCH₂S)₂MoCp. The x-ray structure of
anti-[CpMoS₂]₂ was detd.

L7 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1980:513702 CAPLUS

DN 93:113702

TI Effect of polymer attachment on the equilibrium acidity of an
organotransition metal hydride and an organic
carboxylic acid. Synthesis and properties of a polymer-supported metal
anion

AU Frommer, Jane E.; Bergman, Robert G.

CS Univ. California, Berkeley, CA, USA

SO J. Am. Chem. Soc. (1980), 102(16), 5227-34

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB A polystyrene-attached

.eta.⁵-cyclopentadienyl(tricarbonyl)hydridomolybden-
um complex (I) was prepd. and its reactions with several THF-sol. bases
were studied. Enolates of .beta.-dicarbonyl compds. quant. deprotonate

I,
giving polymer-bound salts of the corresponding anion (II).

Equilibration
studies involving polymers I and II and their sol. monomeric analogs in
THF demonstrated that little change in pK_a is induced by binding the
molybdenum hydride to the polymer. Even though the polymer-supported
partners in these expts. are not sol. and therefore render the reactions
heterogeneous, the systems adhere reasonably well to conventional equil.
behavior, as exhibited by a simple equil. anal. which yields effectively
const. K_{eq} values. A polymer-bound carboxylic acid and its conjugate

base
also displayed essentially conventional equil. dynamics.

L7 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1978:507472 CAPLUS

DN 89:107472

TI Reduction of cyclic anhydrides. II. Factors affecting regioselectivity
of attack on the carbonyl group by metal hydrides

AU Kayser, Margaret M.; Morand, Peter

CS Dep. Chem., Univ. Ottawa, Ottawa, Ont., Can.

SO Can. J. Chem. (1978), 56(11), 1524-32

CODEN: CJCHAG; ISSN: 0008-4042

DT Journal

LA English

AB The redn. of unsym. substituted cyclic anhydrides with metal hydrides
often leads to the preferential formation of one of the two possible
lactones. In the light of recent exptl. findings and theories concerning
metal hydride addn. to the carbonyl function, the
electronic and steric factors influencing regioselectivity of cyclic
anhydride redns. are discussed and an explanation for the obsd. patterns
is offered.

L7 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2000 ACS

AN 1974:463737 CAPLUS

DN 81:63737

TI Iodo- and hydridotantalum(III) complexes of dialkylacetylenes

AU Labinger, Jay A.; Schwartz, Jeffrey; Townsend, John M.

CS Dep. Chem., Princeton Univ., Princeton, N. J., USA
 SO J. Amer. Chem. Soc. (1974), 96(12), 4009-11
 CODEN: JACSAT
 DT Journal
 LA English
 AB The synthesis and characterization of bis(.eta.5-methylcyclopentadienyl)iodo- and -hydridotantalum(dialkylacetylene) complexes (.eta.5-C5H4Me)2 TaX(RC.tplbond.CR1) (R = R1 = Pr; R = Me, R1 = Me2CH; R = Me, R1 = Bu; R = Me, R1 = Bu; X = H, I) are described. Iodo complexes were prepd. from (.eta.5-C5H4Me)2TaH3, PhI, and RC.tplbond.CR1. Hydrido complexes were prepd. by redn. of iodo complexes. The latter compds. represent the first examples of isolable hydridometal(acetylene) species which may be models for intermediates in reactions in which metal hydride insertion with coordinated acetylenes occurs.

L7 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2000 ACS
 AN 1972:67897 CAPLUS
 DN 76:67897
 TI Colorimetric oxygen detector
 IN Hogan, John P.; Witt, Donald R.
 PA Phillips Petroleum Co.
 SO U.S., 2 pp.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3626742	A	19711214	US 1969-844615	19690724
AB	O, S oxides, and N oxides in a gas stream can be detected by the color change produced by the sample in the product of the reaction of a transition metal complex, such as an acetylacetone or cyclopentadiene complex of Ti, Zr, Ta, V, Cr, Mn, Fe, Co, or Ni, with a metal hydride or alkyl metal compd. The sample can be bubbled through a soln. of the reaction product or passed through a support, such as SiO2 or zirconia, contg. the reaction product.				

L7 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2000 ACS
 AN 1969:480817 CAPLUS
 DN 71:80817
 TI Isomerization of 5-vinylbicyclo[2.2.1]hept-2-ene to 5-ethylidenebicyclo[2.2.1]hept-2-ene
 IN Schneider, Wolfgang
 PA Goodrich, B. F., Co.
 SO Fr., 5 pp.
 CODEN: FRXXAK

DT Patent
 LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 1556198		19690131		
PRAI	US		19670320		
AB	5-Ethylidenebicyclo[2.2.1]-hept-2-ene (I) is prepd. by the isomerization of 5-vinylbicyclo-[2.2.1]hept-2-ene (II) optionally in inert hydrocarbon solvent at 40-250.degree. in the presence of 0.01-30% of a reduced Co catalyst prepd. by treating a Co compd. with a reducing agent comprising Group IA, IIA, IIIA or lanthanide metal, a metal alloy, a metal hydride, or an organometal. I is useful as the third monomer in the polymn. of ethylene and propylene with the ring double bond constituting an active copolymn. point and the ethylidene double bond acting as a vulcanization point. Thus, 135 g. II (prepd. by the Diels-Alder addn. of 1,3-cyclopentadiene with 1,3-butadiene) and 2 g. Co acetylacetonate were charged at ambient temp. under Ar, 4 ml. iso-Bu3Al was added, and the temp. raised to 105.degree. and kept 8 hrs. under Ar to give 94% conversion to I. Similar results were obtained				

using

Et2Zn or iso-Bu3B as reducing agents or CoBr2 or Co(OAc)2.

09/341,498

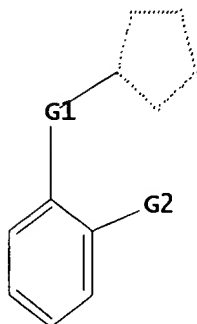
(FILE 'HOME' ENTERED AT 14:12:03 ON 27 SEP 2000)

FILE 'REGISTRY' ENTERED AT 14:12:12 ON 27 SEP 2000

L1 STRUCTURE UPLOADED
L2 QUE L1

=> d l1

L1 HAS NO ANSWERS
L1 STR



G1 C, Si, Ge, Sn

G2 O, S, Se, Te

Structure attributes must be viewed using STN Express query preparation.

=> s l2

SAMPLE SEARCH INITIATED 14:17:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 26241 TO ITERATE

3.8% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 515197 TO 534443
PROJECTED ANSWERS: 217 TO 831

L3 1 SEA SSS SAM L1

=> s l2 full

FULL SEARCH INITIATED 14:17:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 525228 TO ITERATE

76.2% PROCESSED 400000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.12

462 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 525228 TO 525228
PROJECTED ANSWERS: 533 TO 679

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

126.60

126.75

FILE 'CAPLUS' ENTERED AT 14:17:59 ON 27 SEP 2000

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2000 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 27 Sep 2000 VOL 133 ISS 14

FILE LAST UPDATED: 26 Sep 2000 (20000926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Now you can extend your author, patent assignee, patent information, and title searches back to 1907. The records from 1907-1966 now have this searchable data in CAOLD. You now have electronic access to all of CA: 1907 to 1966 in CAOLD and 1967 to the present in CAPLUS on STN.

=> s 14/p

L5 161 L4/P

=> s 15 and metal hydride

1077782 METAL

71691 HYDRIDE

4840 METAL HYDRIDE

(METAL(W)HYDRIDE)

L6 1 L5 AND METAL HYDRIDE

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2000 ACS

AN 1998:490645 CAPLUS

DN 129:136308

TI Process for producing cyclopentadienyl metal salts and process for producing cyclopentadiene derivatives by utilizing the same

IN Oda, Yoshiaki; Yamauchi, Kazuhiro; Hanaoka, Hidenori; Souda, Hiroshi

PA Sumitomo Chemical Co., Ltd., Japan; Oda, Yoshiaki; Yamauchi, Kazuhiro; Hanaoka, Hidenori; Souda, Hiroshi

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

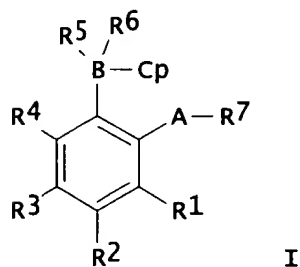
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9830567	A1	19980716	WO 1998-JP110	19980114
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE	JP 10259188	A2	19980929	JP 1998-5184	19980113
	JP 10259152	A2	19980929	JP 1998-5185	19980113
	JP 10259185	A2	19980929	JP 1998-5527	19980114

EP 963990 A1 19991215 EP 1998-900362 19980114
 R: DE, FR, GB, NL
 PRAI JP 1997-5036 19970114
 JP 1997-5037 19970114
 WO 1998-JP110 19980114
 OS CASREACT 129:136308; MARPAT 129:136308
 GI



AB Claimed is a process for producing cyclopentadienyl metal salts which comprises reacting a cyclopentadiene deriv. with a metal hydride in the presence of an amine compd. This document also discloses a process for producing cyclopentadiene derivs. I [A represents a Group 16 element of the Periodic Table; B represents a Group 14 element; R1 to R6 each represents alkyl, etc.; and R7 represents a hydrocarbon group or a trisubstituted silyl; Cp = cyclopentadiene moiety] by utilizing this reaction. By using these processes, not only a variety of cyclopentadienyl metal salts but cyclopentadiene derivs. can be produced in high yields with high conversions without using an expensive reagent or low-temp. facilities.